

CA2 ALM
A56
1971/1972
c.2

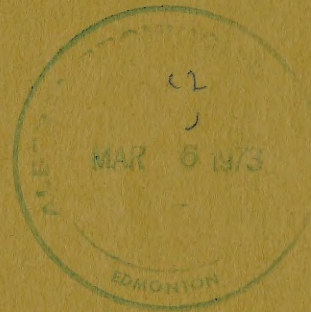
ALBERTA LEGISLATURE LIBRARY



3 3398 00377 9831

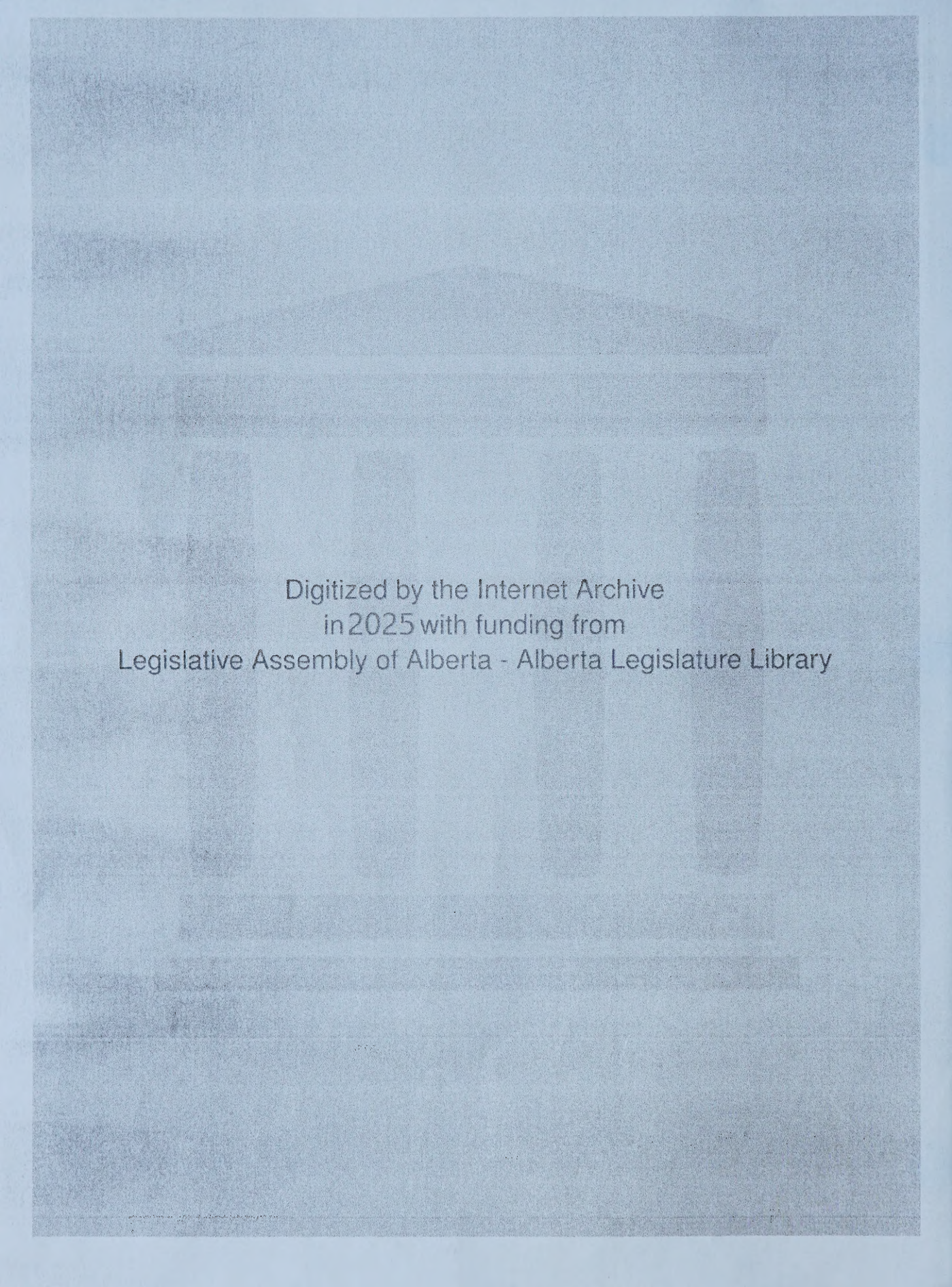
Twenty-Third Annual Report

March 31st
1972



Alberta

LL Dept of MINES AND MINERALS



Digitized by the Internet Archive
in 2025 with funding from
Legislative Assembly of Alberta - Alberta Legislature Library

Twenty-Third Annual Report March 31st 1972



MINES AND MINERALS

Twenty-Fifth
Annual Report
March 31st
1975



To the Honourable J. W. GRANT MacEWAN,
Lieutenant Governor of the Province of Alberta

Sir:

I have the honour to submit the Report of the Department of Mines and Minerals for the fiscal year ended March 31st, 1972.

I have the honour to be, Sir,

Your obedient servant,

BILL DICKIE, Q.C.,

Minister of Mines and Minerals

Edmonton, August 8, 1972.

Table of Contents



ACKNOWLEDGMENTS

TO THE MEMBERS OF THE BOARD OF TRUSTEES OF THE UNIVERSITY OF CALIFORNIA

TO THE FACULTY OF THE UNIVERSITY OF CALIFORNIA

TO THE STUDENTS OF THE UNIVERSITY OF CALIFORNIA

TO THE ALUMNI OF THE UNIVERSITY OF CALIFORNIA

TO THE PRESIDENT OF THE UNIVERSITY OF CALIFORNIA

TO THE VICE PRESIDENT OF THE UNIVERSITY OF CALIFORNIA

TO THE DEANS OF THE SCHOOLS OF THE UNIVERSITY OF CALIFORNIA

TO THE CHAIRMAN OF THE BOARD OF TRUSTEES OF THE UNIVERSITY OF CALIFORNIA

TO THE MEMBERS OF THE BOARD OF TRUSTEES OF THE UNIVERSITY OF CALIFORNIA

TO THE FACULTY OF THE UNIVERSITY OF CALIFORNIA

TO THE STUDENTS OF THE UNIVERSITY OF CALIFORNIA

TO THE ALUMNI OF THE UNIVERSITY OF CALIFORNIA

TO THE PRESIDENT OF THE UNIVERSITY OF CALIFORNIA

TO THE VICE PRESIDENT OF THE UNIVERSITY OF CALIFORNIA

TO THE DEANS OF THE SCHOOLS OF THE UNIVERSITY OF CALIFORNIA

Table of Contents

	Page
REPORT OF THE DEPUTY MINISTER	9
MINERALS DIVISION	
Report of the Director	13
MINERAL TAX DIVISION	
Report of the Superintendent	21
TECHNICAL DIVISION	
Report of the Superintendent	25
ACCOUNTS	
Report of the Accountant	29
PERSONNEL	
Report of the Personnel Officer	35

Chief Officers

DEPARTMENT OF MINES AND MINERALS

MARCH 31st, 1972.

Hon. Bill Dickie, Q.C.,	<i>Minister</i>
H. H. Somerville	<i>Deputy Minister</i>
E. K. Spady	<i>Solicitor</i>
J. J. Heron	<i>Statistician</i>
B. P. P. Muir	<i>Accountant</i>
N. C. Parry	<i>Personnel Officer</i>

MINERALS DIVISION

M. J. Day	<i>Director</i>
F. Holubowich	<i>Assistant Director</i>
Vacant	<i>Supervisor of Revenue</i>
W. H. Roy	<i>Supervisor of Reservations, Permits and Licences</i>
B. R. Nimchuk	<i>Supervisor of Leases and Mining Recorder, Edmonton District</i>
D. C. MacMillan	<i>Mining Recorder, Calgary District</i>

MINERAL TAX DIVISION

I. M. Harrington	<i>Superintendent</i>
N. B. Adam	<i>Assistant Superintendent</i>
W. McGeachie	<i>Chief Assessor</i>

TECHNICAL DIVISION

J. M. Novak	<i>Superintendent</i>
E. G. Staniforth	<i>Assistant Superintendent</i>
E. D. Barnard	<i>Supervisor of Records</i>

TWENTY-THIRD ANNUAL REPORT
OF THE
Department of Mines and Minerals

HONOURABLE BILL DICKIE, O.C.,
Minister of Mines and Minerals,
Edmonton, Alberta.

Sir:

I have the honour to present the Annual Report of the Department of Mines and Minerals for the fiscal year ended March 31, 1972.

Total value of mineral production for 1971 increased 18 per cent to an estimated \$1.652 billion and placed Alberta, for the first time, in the top position in Canada with 28 per cent of the Canadian total. Mineral fuels accounted for about 95 per cent of total value, with conventional crude oil contributing the largest portion at \$1.032 billion.

Conventional crude oil production increased 9.1 per cent from 894,031 barrels a day to 975,235 barrels a day. Liquids recovered from the processing of natural gas amounted to 267,798 barrels a day and, with the addition of synthetic crude oil, raised production of all liquids over 1970 by 9.9 per cent to 1,243,033 barrels a day. This was the second year in a row that the million barrel a day mark was exceeded.

Exports of petroleum liquids to the United States rose 13.2 per cent to 686,000 barrels a day, accounting for 55.5 per cent of total Alberta disposition. The next largest market was in Ontario which took an average of 260,793 barrels a day or 21.1 per cent of Alberta deliveries. Other Provinces and the Yukon and Northwest Territories took the bulk of the remainder.

Natural gas deliveries were up 10.9 per cent from 1.48 trillion cubic feet to 1.64 trillion cubic feet. Exports to the United States increased by 19.2 per cent from 1.7 billion cubic feet a day to 2.0 billion cubic feet a day, accounting for 45 per cent of Alberta deliveries. Consumption in Alberta was 0.7 billion cubic feet a day (16 per cent), Ontario used 1.2 billion cubic feet a day (26 per cent) and deliveries of 0.6 billion cubic feet a day to other Provinces accounted for the remaining 13 per cent.

Elemental sulphur production increased by 834 long tons a day in 1971 to 12,290 long tons a

day but prices continued at depressed levels of about \$7.22 a ton average. Alberta production has changed Canada from a net importer of sulphur to become, since 1968, the world's largest exporter of elemental sulphur.

Capital value of the nine new gas processing plants completed in 1971 was about \$70 million. This figure does not fully reflect total capital expenditures on gas plant construction however, because two major plants costing about \$120 million were not completed until early in 1972.

The number of gas processing plants operating at year-end was 138 and they processed 86 per cent of the total marketable gas made available during 1971. Sulphur is recovered at 36 of these plants.

Exploration activity remained relatively static in 1971. Although the number of exploratory tests drilled during the last three years has been at record levels of over 900 a year, average depth and cost continues to drop because of a concentration of drilling for natural gas in the shallow portion of the Alberta sedimentary basin. The year 1971 established a record for the number of successful exploratory gas wells while development drilling for gas was also at an all-time peak.

Reserves of natural gas were 45.3 trillion cubic feet at the end of 1971 and conventional oil reserves were 7.38 billion barrels.

Coal mined increased 32 per cent from 6.8 million short tons to a record 8.9 million short tons while the value of sales was up from \$26.7 million to \$41.8 million. Japan took 42 per cent of sales, or 3.3 million tons, and 4.3 million tons were consumed in Alberta, mainly for the generation of electric power. Small amounts were shipped to the Provinces of British Columbia, Saskatchewan, Manitoba, Ontario and Quebec. The United States took only six thousand tons and 93 thousand tons were exported to Belgium and France for trial use.

Approval was given by the Lieutenant Governor in Council in February 1972 to Syncrude Canada

Ltd., for an increase from 80,000 barrels a day to 125,000 barrels a day of synthetic crude at their proposed scheme near Fort McMurray. The \$500 million surface mining project will be situated near the plant of Great Canadian Oil Sands Ltd. which has been operating since 1967.

The \$84 million Edmonton refinery of Gulf Oil Canada Limited was completed with a daily capacity of 80,000 barrels of crude oil. The new facilities replace the original built 20 years ago. Imperial Oil Limited announced its major new refinery project in the Edmonton area. Cost will be about \$200 million and crude oil capacity will be 140,000 barrels a day when the facilities are completed.

Provisions under The Energy Resources Conservation Act were proclaimed as of January 1, 1972 for the transfer to the Energy Resources Conservation Board of the responsibility for the administration of

- (a) The Pipe Line Act
- (b) The Coal Mines Regulation Act, and
- (c) The Quarries Regulation Act

The transfer thus brings under one administrative authority all aspects of the energy resources of Alberta including their conservation, regulation and transmission.

A separate report regarding the operation of coal mines and quarries may be obtained from the Energy Resources Conservation Board, 603 Sixth Avenue S.W., Calgary, Alberta.

Detailed reports of the Divisions of the Department follow.

H. H. SOMERVILLE,
Deputy Minister.

August 1, 1972

**Minerals
Division**

Minerals Division

Report of The Director Of Minerals

MICHAEL J. DAY

The Province is divided into two mining districts. The Edmonton district comprises that portion of the Province lying to the north of the north boundary of township 42; the balance of the Province lying to the south is contained in the Calgary district. During the fiscal year 4,737 applications for mineral rights were filed at the office of the Mining Recorder in Edmonton and Calgary and at the Department in Edmonton; an increase of 19.6% from the previous year.

Mineral rights, the property of the Crown in right of Alberta, are not sold but are granted under lease, reservation, permit or other agreement for limited periods of time.

Petroleum and natural gas permits are the exploratory agreements transferred in Block A, that portion of the Province lying between the fourth and fifth meridians from townships one to 64 inclusive. They differ from petroleum and natural gas reservations (the major exploratory agreement disposed of outside Block A) chiefly in that a well must be commenced within two years in order to acquire leases; which may then comprise up to 100% of the permit. Petroleum and natural gas reservations, however, have a longer life and may be maintained in good standing by other forms of exploratory examination such as geophysical work. Lease applications out of a reservation may not comprise more than 50% of the rights in any township, the remaining 50% reverting to the Crown for subsequent dispositions as Crown Reserves.

Revenue obtained from bonuses, fees, rentals, royalties and other miscellaneous charges during the fiscal year was \$272,774,814, an increase of \$39,906,885 or 17.1% from the previous fiscal year. This increase was chiefly attributable to a rise in production of oil, natural gas and gas products with royalties from these minerals increasing by \$30,919,656 to \$174,637,712 or 64% of the total revenue.

Sales of Crown Reserve leases and other Crown Reserve dispositions relating to petroleum and natural gas amounted to \$21,070,187, a decrease of \$5,466,859. Sales of petroleum and natural gas reservations, permits and leases of other than Crown Reserve areas amounted to \$25,190,568, an increase of \$11,801,383 over the previous year.

There were 1,938 wells completed during 1971 of which 912 were exploratory. Total footage drilled was 7,814,854 feet compared with 7,879,801 feet the previous year. At December 31, 1971 there were 14,065 oil wells and 3,426 gas wells capable of producing as well as 1,801 capped gas wells.

Conventional crude oil production in 1971 rose 9.1% to 355,960,790 barrels and was valued at \$1,031,792,908. During December, daily production capacity reached 1,677,000 barrels but restrictions on carrying capacity limited average daily production to 1,163,000 barrels.

The production and value of some of Alberta's other important minerals in 1971 were as follows:

	Production	Change from 1970	Estimated Value 1971
Synthetic Crude	15,540,132 bbl.	+28.6%	\$ 46,511,190
Natural Gas (marketed)	1,638,991,152 MCF	+10.9%	163,899,115
Pentanes Plus	44,500,100 bbl.	+ 6.2%	130,784,618
Propane	22,954,256 bbl.	+14.4%	36,038,182
Butanes	14,751,919 bbl.	+17.6%	19,915,091
Sulphur	4,485,861 long tons	+ 7.6%	32,376,391
Coal	8,931,468 short tons	+31.7%	41,837,437

A tabulation of leases together with statements of business transacted follows:

NUMBER OF MINERAL LEASES

Type of Lease	Active at April 1, 1971	Issued	Reinstated	Divided	Cancelled	Renewed	Active at March 31, 1972
Petroleum and Natural Gas	33,145	2,870	74	278	3,974		32,393
Natural Gas	1,288	52		19	47		1,312
Petroleum	18	3					21
Coal	711	951		1	21	36	1,606
Road Allowance Coal	88	221			6	1	302
Quarrying	91	3	1		11		84
Salt	2						2
Bituminous Sands	84						84
Oil Sands	54	3					57
Iron	5						5
Sodium Sulphate	2						2
Quartz Minerals		12			1		11
Miscellaneous	10						10
TOTAL	35,498	4,115	75	298	4,060	37	35,889

ACREAGE CONTAINED IN ABOVE LEASES

Type of Lease	Active at April 1, 1971	Issued	Reinstated	Cancelled	Renewed	Active at April 1, 1972
Petroleum and Natural Gas	41,614,302	3,934,090	106,378	5,902,707		39,752,063
Natural Gas	4,678,651	277,555		48,405		4,907,801
Petroleum	55,323	2,880				58,203
Coal	620,560	1,323,251		41,708	5,749	1,896,354
Quarrying	19,039	616	40	4,067		15,628
Salt	1,204					1,204
Bituminous Sands	2,695,045					2,695,045
Oil Sands	1,473,166	42,486				1,515,652
Iron	40,057					40,057
Sodium Sulphate	2,157					2,157
Quartz Minerals		33,789		9,593		24,196
Miscellaneous	1,361					1,361
TOTAL	51,200,865	5,614,667	106,418	6,006,480	5,749	50,909,721

STATEMENT OF BUSINESS TRANSACTED, 1971 - 1972

PETROLEUM AND NATURAL GAS

	Number	Acres
Leases issued	2,870	3,934,090
Leases cancelled and relinquished	3,974	5,902,707
Leases reinstated	74	106,378
Reservations issued	272	8,907,784
Reservations terminated	98	2,814,639
Crown reserve drilling reservations issued	59	513,790
Crown reserve drilling reservations terminated	68	650,860
Permits issued	196	3,146,830
Permits terminated	127	1,856,597
Natural gas licences issued	19	267,305
Natural gas licences terminated	20	295,708
Crown reserve natural gas licences issued	15	239,911
Crown reserve natural gas licences terminated	16	179,429
Natural Gas leases issued	52	277,555
Natural gas leases cancelled and relinquished	47	48,405
Petroleum leases issued	3	2,880
Fees, rentals, penalties and bonuses collected	\$ 71,346,061.94	
Royalties collected	174,637,712.35	
Crown Reserve sales	21,070,186.90	
TOTAL	<u>\$267,053,961.19</u>	

COAL

	Number	Acres
Leases issued	951	1,323,251
Leases cancelled and relinquished	21	41,708
Road allowance leases —		
Leases issued	221	
Leases cancelled and relinquished	6	
Fees and rentals collected	\$1,956,023.99	
Royalties collected	599,702.75	
TOTAL	<u>\$2,515,726.74</u>	

QUARRYING

	Number	Acres
Leases issued	3	616
Leases cancelled and relinquished	11	4,067
Fees collected	\$ 40.00	
Royalties collected	79,686.10	
TOTAL	<u>\$79,726.10</u>	

MISCELLANEOUS

	Number
Oil sands prospecting permits terminated	2
Oil sands leases issued	3
Quartz mineral exploration permits terminated	37
Quartz minerals leases issued	12
Quartz minerals leases terminated	1
Quartz —	
Certificates of record issued	13
Certificates of record continued	130
Transfers recorded	Nil
Roadway mineral sales	Nil
Geophysical licences issued	123
Permits to operate geophysical equipment issued	5
Permits to operate geophysical equipment renewed	84
Fees, rentals, royalties and miscellaneous charges	\$3,125,400.01

Leases — During the year 2870 petroleum and natural gas leases were granted comprising 3,934,090 acres and at the close of the fiscal year a total of 32,393 leases were in existence comprising an area of 39,752,063 acres. The Mines and Minerals Act, 1962, which came into force on June 1, 1962 provided that each petroleum and natural gas lease granted following an application made under the Act would be for a term of ten years and at the end of the fiscal year there were 20,098 of these leases comprising 24,753,876 acres. Leases formerly granted were for a term of 21 years and any lease that follows a petroleum and natural gas reservation or Crown reserve drilling reservation that was granted before June 1, 1962, also has a term of 21 years. In the same way if a 21 year lease is transferred only as to a portion or is divided, the new lease for the transferred portion or divided portion also carried the 21 year term.

The revenue received from fees amounted to \$28,270.00. The revenue from lease rentals was \$36,497,856.63 and the revenue from bonuses accepted by the Mining Recorders at sales of petroleum and natural gas leases by tender amounted to \$3,484,097.74. The revenue from compensatory royalty on petroleum and natural gas leases amounted to \$27,521.40 and from drilling extension penalties \$249,111.96.

Disposal of Crown Reserves — Petroleum and natural gas rights comprised in Crown reserves may be disposed of by order of the Lieutenant Governor in Council and during the year four Crown reserve sales were held and 434 leases and three reservations were purchased. Eight Crown reserve drilling reservation sales were held and 59 drilling reservations were purchased. Two Crown reserve natural gas licence sales were held and 15 Crown reserve natural gas licences were purchased. Particulars of Crown reserve purchases during the year may be obtained from the Department.

Reservations — During the fiscal year 272 reservations were issued comprising an area of 8,907,784 acres and at the close of the year 756 reservations were active comprising an area of 23,479,134 acres.

The revenue from reservation fees amounted to \$70,250.00; for extending reservations amounted to \$3,383,199.45 and the revenue from bonuses accepted by the Director of Minerals at sales of petroleum and natural gas reservations by tender amounted to \$10,581,444.36, an increase of \$6,005,622.85 from the previous fiscal year.

Credit of not in excess of fifty per cent of the approved expenditures incurred in geophysical examination including drilling on petroleum and natural gas reservations may apply to the rental for one year of any lease of leases acquired out of reservations and during the fiscal year under review

rentals of \$1,380,772.00 were satisfied from such expenditures.

Crown Reserve Drilling Reservations — During the fiscal year 59 drilling reservations were issued comprising an area of 513,790 acres and at the close of the year 86 were active comprising an area of 775,915 acres.

The revenue from drilling reservation fees amounted to \$14,750.00, from rentals \$390,009.27 and the revenue from accepted offers at sales of Crown reserve drilling reservations amounted to \$7,256,550.13.

Credit may be granted for expenditures incurred in drilling a well on a drilling reservation and applied in satisfaction of the first year's rental. During the fiscal year rentals on leases acquired out of the reservations of \$84,160.00 were satisfied by credit.

Petroleum and Natural Gas Permits — During the fiscal year 196 permits covering an area of 3,146,830 acres were issued and at the close of the year 261 permits were active comprising an area of 4,329,630 acres. The revenue from fees was \$2,160.00 and from rentals was \$4,029,877.20 and the revenue from accepted offers at sales or permits, generally in east-central Alberta, was \$11,044,385.70, an increase of \$4,278,899.92 or 63% compared to the previous fiscal year. Credit of not in excess of fifty per cent may be granted for expenditures incurred in drilling a well on a permit and applied in satisfaction of the first year's rental. During the fiscal year rentals on leases acquired out of permits of \$1,388,717.44 were satisfied by credit.

Natural Gas Licences — During the fiscal year 19 natural gas licences comprising an area of 267,305 acres were issued. The revenue from fees was \$5,006.00 and from rentals was \$27,073.60. Credit may be granted for expenditures incurred in drilling a well on a natural gas licence and applied in satisfaction of the first year's rental. During the fiscal year rentals on leases acquired out of the licences of \$55,309.17 were satisfied by credit.

Crown Reserve Natural Gas Licences — During the fiscal year 15 Crown reserve natural gas licences comprising an area of 239,911 acres were issued. At the close of the year 27 licences were active, comprising an area of 392,247 acres. The revenue from fees was \$3,750.00, from rentals \$43,433.00 and the revenue from accepted offers at sales of Crown reserve natural gas licences amounted to \$1,621,871.92. During the fiscal year rentals on leases acquired out of licences of \$4,654.30 were satisfied by credit.

Natural Gas Leases — During the fiscal year 52 natural gas leases were issued comprising 277,555 acres and at the close of the fiscal year a total of 1,312 leases were in existence comprising an area of 4,907,801 acres. Forty-eight of the leases were granted out of natural gas licences of Crown reserve natural gas licences and permit the recovery of natural gas from one or more zones specified in the lease. Four leases were issued comprising the balance of the spacing units to permit natural gas wells that were capable of commercial production to be operated at full production allowables.

The annual rental of a natural gas lease is thirty-three and one-third cents an acre. While an adequate market or a market in which the lessee may participate is not available, the annual rental is reduced to ten cents an acre. The revenue from fees was \$560.00 and from lease rentals \$1,382,665.63.

COAL

In the fiscal year, 951 leases were issued comprising 1,323,851 acres, being made up of new and renewal and second renewal leases. There are now 1,606 active leases comprising 1,896,354 acres. There were 221 road allowance coal mining leases issued and there are now 302 active. The revenue received from fees was \$11,590.00 and from lease rentals \$1,944,350.99.

Crown royalties collected during the fiscal year were \$559,702.75 and the following tonnage of coal subject to royalty was mined.

Coal Leases	5,086,087
Coal Land and Mineral Sales	648,546

TOTAL	<u>5,734,633</u>
--------------------	-------------------------

QUARRYING

During the fiscal year three quarrying leases comprising a total of 616 acres were issued. At the close of the fiscal year 84 quarrying leases comprising an area of 15,628 acres were active.

Extraction of 1,578,770 tons of limestone and shale, 23,336 cubic yards of clay and 6,875 tons of sandstone from Crown leases was reported during the calendar year.

BITUMINOUS SANDS

There were 84 leases active at the close of the fiscal year, comprising an area of 2,695,045 acres.

OIL SANDS

There was one permit and 57 leases active at the close of the fiscal year, comprising an area of 1,565,063 acres.

QUARTZ

During the fiscal year 13 certificates of record were issued and 130 certificates of record were continued for a further year.

There were two quartz mineral exploration permits issued during the year.

GOLD RECOVERY

In connection with a sand and gravel operation there were 68 ounces of gold and 6 ounces of silver recovered during the fiscal year.

SODIUM CHLORIDE (common salt)

During the calendar year the plant near Lindbergh operated and reported extraction of 77,188 tons, an increase of 3,461 tons from the previous year.

SODIUM SULPHATE

Two sodium sulphate leases comprising 2,157 acres were active at the close of the fiscal year. During the calendar year the plant near Provost operated and reported extraction of 78,184 tons, an increase of 3,661 tons from the previous year.

IRON

Five iron leases containing an area of 40,057 acres were active at the close of the fiscal year.

ROADWAY MINERAL SALES

During the fiscal year no notifications were issued pursuant to section 24 of The Mines and Minerals Act, 1962. Section 24 provides a means whereby minerals in roadways may be returned to the adjacent mineral owner.

WELL LICENCES

During the fiscal year there were 2,190 licences issued for wells to be drilled for the purpose of obtaining oil or gas, 132 were issued for geological and engineering information, 26 licences were issued for wells to be drilled for the purpose of obtaining water for injection and 16 were issued for domestic water wells at depths in excess of 500 feet, 21 licences were issued for wells to be drilled for the purpose of injecting gas, air, water or other substance to an underground formation, five licences were issued for LPG storage, three for farm gas wells and one each for a salt water disposal well and a relief well. Since January 1, 1968 well licences have been issued by the Energy Resources Conservation Board.

DRILLING STATISTICS

The oil and gas conservation regulations relating to oil and gas wells in the province are administered by the Energy Resources Conservation Board, 603 - 6th Avenue South West, Calgary, Alberta, and particulars as to drilling activity, production and statistical data are included in weekly, monthly and annual reports issued by the Board.

GEOPHYSICAL AND GEOLOGICAL EXPLORATION

During the fiscal year 123 licences and 5 permits were issued and 84 permits were renewed.

UNIT OPERATION OF MINERALS

During the fiscal year 17 agreements pursuant to Part 8 of The Mines and Minerals Act became effective for unit operation of petroleum and natural gas properties. These agreements were:

- Bellis Gas Unit No. 1
- Bigoray Unit No. 1
- Black Keg River A Unit
- Chauvin South Lloydminster Unit No. 4
- Chauvin South Sparky Unit No. 3
- Devonia Lake Unit No. 1
- Donalda Unit
- Gilby Viking "B" Unit No. 1
- Greencourt Gas Unit No. 1
- Jumping Pound West Unit No. 2

- Leckie Upper Mannville "B" Pool Unit
- Lone Pine Creek Gas Unit No. 5
- Pembina Keystone Cardium Unit No. 2
- Provost Gas Unit No. 3
- Provost Viking Verteran Unit
- West Nipisi Unit No. 1
- Whitcourt Gas Unit No. 1

Where a person is required by or has the approval of the Energy Resources Conservation Board to proceed with a scheme to inject any substance into an underground formation, he is permitted by section 53 of The Mines and Minerals Act to proceed with the scheme without obtaining an agreement.

There were 19 schemes approved for the enhanced recovery of oil by water injection in which Crown mineral rights were involved, and 3 such approvals involving Freehold minerals exclusively.

STAFF

At the close of the fiscal year the Division staff comprised 80 positions, of which two were vacant. One of these vacancies existed in the position of Supervisor of Revenue, arising from the promotion of Mr. F. J. Holubowich to the position of Assistant Director of the Minerals Division on October 15, 1971.

Mr. M. J. Day, former Assistant Director, was promoted to Director May 17, 1971.

**Mineral
Tax
Division**

Mineral Tax Division

Report of the Superintendent

I. M. HARRINGTON

Producing area tax revenue for the fiscal year ending Mar. 31, 1972, amounted to \$1,977,266.30, and increase of \$344,924.23 from the previous year's revenue of \$1,632,342.07. The rate of tax on the 1971 assessment was eight mills.

The principal minerals assessed and the total assessed values were:

Petroleum	\$190,735,302.73
Natural Gas	57,443,113.43
Coal	767,256.90
Salt	256,992.00
TOTAL	\$249,202,665.06

Mineral tax based on acreage for the fiscal year was received in the amount of \$908,128.03, a decrease of \$24,550.70 from the \$932,678.73 received in the preceding year. The rate of tax was five cents an acre.

There were 645 mineral tax certificates issued during the fiscal year with revenue derived therefrom being \$322.50. A tax certificate shows the amount of current taxes and arrears payable with respect to the mineral or minerals contained in a certificate of title. Anyone may obtain a certificate for a fee of fifty cents.

Pursuant to The Mineral Titles Redemption Act, after the mineral titles were acquired by the Crown, there were instances where the minerals had been granted under lease, licence, reservation, permit or other agreement, for exploration and development. The statute provides that where the minerals have been granted by the Crown, the return of the title to the former owner must be delayed until the minerals are no longer under lease, licence, reservation, permit or other agreement. In these instances, the former owner is entitled to receive the moneys collected by the Crown less a deduction of an amount equal to the tax that would have been charged had title been returned.

During the fiscal year the amount of moneys collected on existing agreements and returned to former owners was \$40,971.65. This brings the total to \$622,764.84 that has been returned to former owners since the Act came into force.

There were no titles returned to former owners as a result of agreements terminating during the year. As at March 31, 1972, there were 25 titles, the redemption of which will be delayed until the leases or other agreements terminate.

Technical Division

Technical Division

Report of the Superintendent of the Technical Division

J. M. NOVAK

The following report summarizes the operations of the Technical Division for the fiscal year ending March 31, 1972.

Draughting, Land Descriptions and General

The series of maps covering approximately forty-eight townships for each area and on a scale of three-quarters of an inch to a mile showing the status of oil and gas wells and field boundaries were drawn covering the following areas:

BANFF — Townships 22 to 28, Ranges 12 to 17, West of the 5th Meridian.

CLARESHOLM — Townships 7 to 13, Ranges 26 to 30, West of the 4th Meridian

FORT McMURRAY — Townships 85 to 92, Ranges 6 to 10, West of the 4th Meridian

HOUSE RIVER — Townships 77 to 84, Ranges 11 to 15, West of the 4th Meridian

KANANASKIS LAKES — Townships 18 to 21, Ranges 8 to 12, West of the 5th Meridian

MALIGNE LAKE — Townships 36 to 44, Ranges 24 to 28, West of the 5th Meridian, and Ranges 1 to 3, West of the 6th Meridian

PINTO LAKE — Townships 29 to 36, Ranges 18 to 33, West of the 5th Meridian

SURMONT LAKE — Townships 77 to 84, Ranges 6 to 10, West of the 4th Meridian

TOPAZ LAKE — Townships 45 to 52, Ranges 3 to 8, West of the 6th Meridian

WIAU LAKE — Townships 69 to 76, Ranges 6 to 10, West of the 4th Meridian

WINEFRED LAKE — Townships 69 to 76, Ranges 1 to 5, West of the 4th Meridian

WINEFRED RIVER — Townships 77 to 84, Ranges 1 to 5, West of the 4th Meridian

All maps are revised as changes and additions occur.

The following maps in the pipe line series on a scale of 1:750,000 were redrawn:

Oil and Gas Fields and Main Pipe Lines in Alberta

Main Gas Pipe Lines in Alberta

Pipe Lines of The Alberta Gas Trunk Line Company Limited

Pipe Lines of Canadian Western Natural Gas Company Limited, Northland Utilities Limited, Northwestern Utilities, Limited and Plains-Western Gas & Electric Co. Ltd.

Communities Served with Natural Gas in Alberta.

A total of 7,304 maps were distributed by the Department. A list of maps is available indicating the area covered and the price of each map.

During the year, 2,190 licences were issued by the Energy Resources Conservation Board for wells to be drilled for the purpose of obtaining oil or gas, an increase of 319 from the 1,871 licences issued the previous year. The Division searches the ownership of Crown minerals in the spacing unit allocated to the well.

Land descriptions were prepared for all mineral dispositions, as well as descriptions for recommendations to Council.

The photo-reproduction requirements of this Department were processed by the Surveys Branch, Department of Highways and Transport. This Division supplies the ozalid print requirements of the Department.

The Records Branch maintains the records in the Department respecting leases, permits, reservations, licences and other agreements and certificates of record. It also provides township plots to the public indicating availability or status of Crown minerals.

During the year 2,226 transfers were registered relating to 6,618 agreements.
A comparison with the previous year follows:

	<u>1970-71</u>	<u>1971-72</u>
Petroleum and Natural Gas Leases	6,214	5,519
Petroleum Leases	1	1
Natural Gas Leases	115	169
Petroleum and Natural Gas Permits	42	75
Petroleum and Natural Gas Reservations	167	262
Crown Reserve Drilling Reservations	20	19
Crown Reserve Natural Gas Licences	6	10
Coal Leases	32	342
Road Allowance Coal Leases	0	5
Oil Sands Leases	20	13
Bituminous Sands Leases	12	24
Quarrying Leases	1	5
Certificates of Record	17	0
Quartz Mineral Leases	0	2
Quartz Mineral Exploration Permits	14	2
Geophysical Licences	6	2
Geophysical Permits	7	3
Pipe Line Permits	11	66
Pipe Line Licences	194	97
Provisional Pipe Line Licences	6	2
TOTALS	<u>6,885</u>	<u>6,618</u>

The documents filed in comparison with the previous year were:

	<u>1970-71</u>	<u>1971-72</u>
Type of Document		
Mechanics Lien	4	0
Discharge of Mechanics Lien	13	1
Builders Lien	0	27
Lis Pendens	0	1
Assignment of Lien	0	2
Discharge of Builders Lien	0	17
Bank Securities	345	589
Discharge of Bank Security	246	245
Hypothecation of Pipe Line	1	5
Discharge of Hypothecation	1	1
TOTALS	<u>610</u>	<u>888</u>

The 888 documents filed relate to 1,542 agreements.

Seven transfers were issued during the fiscal year for the return of minerals underlying roadways to the owners of adjacent minerals.

Accounts

Accounts

Report of the Accountant

B. P. P. MUIR

A surplus of \$273,628,363.73 on Income Account was shown for the Fiscal Year ending March 31st, 1972.

Net Revenue on Income Account amounted to \$275,797,957.32.

Gross Receipts from all sources amounted to \$284,898,102.99.

Expenditures on Income Account for the year amounted to \$2,169,593.59. Particulars of expenditure may be found in Statement "C".

As at March 31st, 1972 there were 46,041 Accounts Receivable as compared with 45,024 the previous year ending March 31st, 1971.

During the year 5,022 accounts were cancelled or closed and 6,039 reinstated or opened.

INDEX TO STATEMENTS

- A — Statement of Receipts from all sources
- B — Statement of Receipts — Income Account
- C — Statement of Expenditure by Appropriation and Character
- D — Statement of Net Receipts by Divisions
- E — Statement of Receipts and Expenditure
- F — Statement of Fiscal Revenue for the last five years and Total Revenue for the period April 1st, 1949 to March 31st, 1972.

STATEMENT OF RECEIPTS FROM ALL SOURCES

Statement "A"

From April 1st, 1971 to March 31st, 1972

	Gross Receipts	Refunds	Net Receipts
Income Account (See Statement "B")	\$276,393,160.65	\$ 595,203.33	\$275,797,957.32
Transferred Collections	6.32		6.32
Suspense (Unapplied receipts carried forward subject to refund)	8,504,936.02	8,336,791.30	168,144.72
	<u>\$284,898,102.99</u>	<u>\$8,931,994.63</u>	<u>\$275,966,108.36</u>

STATEMENTS OF RECEIPTS — INCOME ACCOUNT

Statement "B"

From April 1st, 1971 to March 31st, 1972

	Gross Receipts	Refunds	Net Receipts
COAL MINING			
Coal Fees, Rentals, etc.	\$ 1,980,957.19	\$ 24,933.20	\$ 1,956,023.99
Coal Royalty	559,702.75		559,702.75
Coal Mines Act Sundry Revenue	2,565.95	159.50	2,406.45
PETROLEUM AND NATURAL GAS			
Petroleum and Natural Gas Fees, Rentals, etc.	71,832,965.87	486,903.93	71,346,061.94
Petroleum and Natural Gas Royalty	174,708,129.49	70,417.14	174,637,712.35
Crown Reserve Sales	21,070,186.90		21,070,186.90
MISCELLANEOUS			
Oil Sands Fees, Rentals and Royalty	3,003,131.86		3,003,131.86
Quarrying Fees, Rentals and Royalty	80,836.10	1,110.00	79,726.10
Miscellaneous Mining	132,081.01	9,812.86	122,268.15
MINERAL TAX	2,886,890.03	1,173.20	2,885,716.83
PIPE LINE ACT SUNDRY REVENUE	12,244.87	100.00	12,144.87
ADMINISTRATION SUNDRY REVENUE	121,739.77	593.50	121,146.27
LANDMAN LICENCE FEES	1,550.00		1,550.00
REIMBURSEMENT OF SALARIES & EXPENDITURES	178.86		178.86
TOTAL — INCOME ACCOUNT (Carried to Statement "A")	<u>\$276,393,160.65</u>	<u>\$595,203.33</u>	<u>\$275,797,957.32</u>

EXPENDITURE CLASSIFIED BY APPROPRIATION AND CHARACTER

Statement "C"

For the Fiscal Year Ended March 31, 1972

INCOME ACCOUNT

SERVICE	2001 Minister's Office	2002 General Administration	2004 Pipe Line Division	2005 Geological Division	2006 Mines Division	2007 Minerals Division	2008 Mineral Tax Division	2010 Technical Division	2011 Abandonment of Mining Properties	2012 Redemption of Mineral Titles	2013 Clay and Marl Crown Lease Act	2014 Right of Entry Arbitration Board	2015 Supervisory and Safety Training Program	2016 Surface Reclamation	TOTAL
Advertising						6,904.68								500.00	6,904.68
Compensation									1,577.62						500.00
Contracts and Agreements															8,737.62
Entertainment Expenses		194.67													194.67
Fees and Commissions		2,221.30			1,184.00			7.00				101.50		2,733.98	6,367.78
Freight, Express and Cartage		569.08			430.83							72.50			1,072.41
Furnishings, Equipment Tools		1,636.24			384.00	4,119.02	1,203.68	3,199.13				1,187.38		1,507.50	13,837.04
Grants, Prizes													3,600.00		3,600.00
Insurance Premiums		.50			.88							3.50		10.00	14.88
Materials, Supplies, Admin and Construction	870.99	21,650.23			1,351.81	3,550.17	1,878.08	20,623.36				2,602.53		549.96	54,840.38
Postage	200.00	2,100.00			544.36	14,664.79	2,300.00	627.20				918.89		950.00	22,803.45
Rentals					5.00	109.50		14,167.01				94.00		532.00	14,907.51
Refunds and Remissions										40,971.65	999.95				41,971.60
Repair and Maintenance of Office Machines and Equipment	147.26	2,533.96			221.29	1,869.75	666.25	1,065.29				433.86		100.21	7,370.18
Salaries	23,153.07	256,819.98			76,646.00	495,488.77	142,213.06	404,277.31				127,852.66		129,762.35	1,811,229.34
Telephone and Telegraph	2,631.55	2,002.44			283.61	7,832.65	20.38	4,758.62				902.75		3,418.70	29,379.21
Travelling Expenses of Other Than Public Servants					336.88									16,703.47	17,040.35
Travelling Expenses of Public Servants	964.58	6,772.00			7,317.65	9,439.64	3,125.30	2,823.10				11,103.34		39,659.17	113,453.21
Tuition		91.10				315.00	90.00	154.75				25.00			675.85
Wages	368.16	4,627.01				4,579.87		2,216.51				945.22		263.54	14,693.43
TOTAL Income Account	28,335.61	301,218.51	199,800.06	7,160.00	88,706.31	548,873.84	151,496.75	453,919.28	1,577.62	40,971.65	999.95	146,243.13	3,600.00	196,690.88	2,169,593.59

STATEMENT OF NET RECEIPTS BY DIVISIONS
For Fiscal Year Ending March 31st, 1972

Statement "D"

INCOME ACCOUNT:

Minerals Division	\$272,774,814.04
Mineral Tax Division	2,885,716.83
Mines Division	2,406.45
Pipe Line Division	12,144.87
Miscellaneous (Administration Sundry Revenue, etc.)	122,875.13

TRANSFERRED TO OTHER DEPARTMENTS 6.32

SUSPENSE (Unapplied receipts carried forward, subject to refund) 168,144.72

\$275,966,108.36

STATEMENT OF RECEIPTS AND EXPENDITURE

Statement "E"

For Fiscal Year Ending March 31st, 1972

<u>GROSS RECEIPTS</u>	<u>REFUNDS</u>	<u>NET RECEIPTS</u>	<u>NET REVENUE ON INCOME ACCOUNT</u>	<u>TOTAL EXPENDITURE FROM APPROPRIATIONS</u>	<u>SURPLUS ON INCOME ACCOUNT</u>
\$284,898,102.99	8,931,994.63	\$275,966,108.36	\$275,797,957.32	2,169,593.59	\$273,628,363.73

Statement "F"

**STATEMENT OF FISCAL REVENUE FOR THE LAST FIVE YEARS AND TOTAL REVENUE
FOR THE PERIOD APRIL 1, 1949 to MARCH 31, 1972**

	Total Revenue April 1, 1949 to March 31, 1967	1967-68	1968-69	1969-70	1970-71	1971-72	Total Revenue April 1, 1949 to March 31, 1972
COAL							
Fees, Rental and Bonus	\$ 1,726,368.06	\$ 189,365.87	\$ 444,322.05	\$ 511,340.11	\$ 1,257,117.68	\$ 1,956,023.99	\$ 6,084,537.76
Royalty	4,281,251.52	232,363.54	198,318.02	140,848.41	383,767.45	559,702.75	5,796,251.69
Sundry Revenue	58,288.61	1,615.80	1,352.00	2,721.00	3,292.30	2,406.45	69,676.16
PETROLEUM AND NATURAL GAS							
Fees, Rental and Bonus	534,900,019.50	53,824,878.34	55,529,455.95	60,933,768.89	58,276,810.35	71,346,061.94	834,810,994.97
Royalty	609,471,089.79	94,071,940.39	105,122,892.49	121,098,447.10	143,718,055.94	174,637,712.35	1,248,120,138.06
Crown Reserve Sales	1,011,994,922.65	69,726,551.37	121,031,177.72	70,294,355.77	26,537,046.31	21,070,186.90	1,320,654,240.72
SALT							
Fees and Rentals	19,792.60	1,005.60	1,010.60	1,012.55	1,004.49	1,005.60	24,831.44
Royalty	191,888.95	20,481.70	20,486.67	20,784.73	20,828.34	21,121.74	295,592.13
QUARRYING							
Fees and Rental	4,648.71	21.00	20.00	100.00	50.00	40.00	4,879.71
Royalty	931,828.47	79,900.35	80,724.58	81,564.32	79,748.91	79,686.10	1,333,452.73
QUARTZ							
Fees, Rental and Bonus	59,622.76	38,115.00	92,439.19	140,812.36	20,741.00	12,987.25	364,717.56
OIL SANDS							
Fees, Rental and Royalty	7,977,644.01	1,002,342.59	2,311,872.60	3,133,772.10	2,445,851.63	3,003,131.86	19,874,614.79
MINING MISCELLANEOUS							
Fees, Rental and Royalty	3,046,755.37	190,915.47	123,589.91	65,028.21	126,907.04	87,153.56	3,640,349.56
MINERAL TAXATION ACT							
Non-producing Area Tax	6,618,973.42	552,929.75	892,070.09	928,707.99	932,678.73	908,128.03	10,833,488.01
Producing Area Tax	17,665,872.74	1,326,667.49	1,459,176.16	1,494,216.92	1,632,342.07	1,977,266.30	25,555,541.68
Certificate Fees	15,214.60	237.50	129.00	99.50	270.50	322.50	16,273.60
PIPE LINE ACT							
SUNDRY REVENUE	83,742.65	12,111.50	12,528.50	12,673.70	15,904.00	12,144.87	149,105.22
ADMINISTRATION SUNDRY REVENUE	1,183,609.97	80,351.73	75,978.46	121,778.43	119,975.22	121,325.13	1,703,018.94
LANDMAN LICENCE FEES			11,855.00	2,585.00	2,840.00	1,550.00	18,830.00
TOTAL	<u>\$2,200,231,534.38</u>	<u>\$221,351,794.99</u>	<u>\$287,409,398.99</u>	<u>\$258,984,617.09</u>	<u>\$235,575,231.96</u>	<u>\$275,797,957.32</u>	<u>\$3,479,350,534.73</u>

Personnel

Personnel

Report of the Personnel Officer

N. C. PARRY

At the commencement of the year there were 271 established department positions. At the end of the year there were 205 established department positions, a net decrease of 66 positions.

The following is a breakdown of the organizational changes which accounted for the decrease.

	POSITIONS
— Pipe Line Division transferred to the Energy Resources Conservation Board	22
— Mines Division transferred to the Energy Resources Conservation Board	9
— Right of Entry Arbitration Board transferred to the Department of Agriculture	16
— Surface Reclamation Council transferred to the Department of The Environment	15
— Four part-time permanent positions were abolished as it was felt that more effective manpower utilization could result from utilizing wage employees for short periods of time	4
TOTAL	<u>66</u>

In addition to the employees who occupied the above positions there was a turnover rate of 53 employees. Of those terminating, 6 left due to change of domicile; 8 resigned to accept employment outside of the Public Service; 10 transferred to other departments; 4 left to further their education; 3 left for maternity reasons; 2 left due to marriage; 2 retired; 1 passed away; 4 left due to their work assignments being completed and 13 left for various other reasons.

With regard to staff development, employees were encouraged to take those courses which would be of most benefit to their over-all personal growth.

Personnel

1960-1961 - 1962-1963

1960-1961

The following is a list of the personnel who were employed by the Department of the Interior during the years 1960-1961 and 1962-1963. The list is arranged in alphabetical order by last name. The first column shows the name of the person, the second column shows the position held, and the third column shows the years of service.

The following is a list of the personnel who were employed by the Department of the Interior during the years 1960-1961 and 1962-1963. The list is arranged in alphabetical order by last name. The first column shows the name of the person, the second column shows the position held, and the third column shows the years of service.

